

Notice of Allowability

Application No.

10/511,603

Applicant(s)

NESTLER ET AL.

Examiner

Art Unit

Ling-Siu Choi

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 04/26/2007.
2. ☒ The allowed claim(s) is/are 1-6 and 8-12.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413), Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

DETAILED ACTION

1. This Office Action is in response to the Amendment and the Declaration, both being filed April 26, 2007. Claim 7 was deleted and claims 1-6 and 8-12 are now pending, wherein claims 1-6 and 11-12 are drawn to a process to prepare a low-odor hydrogel-forming acrylic acid polymer; claim 8 is drawn to a hydrogel-forming addition polymer; claim 9 is drawn to a method to prepare a hygiene article; and claim 10 is drawn to a hygiene article.

Allowable Subject Matter

2. Claims 1-6 and 8-12 are allowed.

3. The following is an examiner's statement of reasons for allowance:

The present claims are allowable over the closest references: Irie et al. (US 6,388,000 B1).

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Summary of claim 1:

| | |
|---|--|
| A process to prepare a low-odor hydrogel-forming acrylic acid polymer, comprising | |
| A | (i) preparing a polymeric hydrogel by free-radically polymerizing a monomer composition comprising at least 50 wt% of acrylic acid containing volatile saturated carboxylic acids selected from the group consisting of <u>acetic acid, propionic acid</u> and combinations thereof as impurities in a total amount of <u>less than 400 ppm</u> by weight, based on the amount of acrylic acid in an aqueous polymerization medium and (ii) converting the hydrogel into a particulate hydrogel or into hydrogel-forming powder; and optionally |
| B | treating the particulate hydrogel or the hydrogel-forming powder with a crosslinking substance which, actually or latently, contains at least two functional groups capable of reacting with the carboxyl groups on the addition polymer |

Irie et al. disclose a method to prepare an absorbent resin, comprising the steps of preparing a water-soluble unsaturated monomer having a ratio of neutralization in the range of 30-100 mol % and containing 50-100 mol % of an acrylate; then polymerizing the monomer in the presence of a first cross-linking agent in an amount of 0.005-5 mol%, based on the amount of monomer; and pulverizing and/or granulating to obtain powdered absorbent resin, wherein the cross-linking agent contains at least two functional groups (abstract; cross-linking agent: col. 10, lines 51-67 and col. 11, lines 1-23; claims 1 and 3). Irie et al. further disclose that the absorbent resin is used in the fields of hygienic materials (col. 1, lines 63-64). However, Irie et al. do not teach or fairly suggest a process to prepare a low-odor hydrogel-forming acrylic acid polymer,

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comprising (i) free-radically polymerizing at least 50 wt% of acrylic acid containing acetic acid, propionic acid, or combinations thereof as impurities in a total amount of less than 400 ppm by weight [based on the amount of acrylic acid] to form a polymeric hydrogel; (ii) converting the hydrogel into a particulate hydrogel; and optionally treating the particulate hydrogel with a crosslinking substance.

In light of the above discussion, it is evident as to why the present claims are patentable over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ling-Siu Choi whose telephone number is 571-272-1098.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reach on 571-272-1114.



LING-SUI CHOI
PRIMARY EXAMINER

July 20, 2007